

PCT09

RAW SEQUENCE LISTING

DATE: 12/21/2001

PATENT APPLICATION: US/09/786,105

TIME: 13:12:24

Input Set : A:\Vgenp055.app

Output Set: N:\CRF3\12212001\I786105.raw

ENTERED

3 <110> APPLICANT: Visible Genetics Inc.
 4 Shipman, Robert
 6 <120> TITLE OF INVENTION: Method and Kit for the Characterization of
 7 Antibiotic-Resistance Mutations in Mycobacterium
 8 tuberculosis
 10 <130> FILE REFERENCE: VGEN.P-055-WO
 C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/786,105
 C--> 13 <141> CURRENT FILING DATE: 2001-09-28
 15 <150> PRIOR APPLICATION NUMBER: 60/111,794
 16 <151> PRIOR FILING DATE: 1998-12-11
 18 <160> NUMBER OF SEQ ID NOS: 50
 20 <170> SOFTWARE: PatentIn Ver. 2.1
 22 <210> SEQ ID NO: 1
 23 <211> LENGTH: 20
 24 <212> TYPE: DNA
 25 <213> ORGANISM: Mycobacterium tuberculosis
 27 <220> FEATURE:
 28 <223> OTHER INFORMATION: rpoB-F amplification primer
 30 <400> SEQUENCE: 1
 31 tacggtcggc gagctgatcc 20
 34 <210> SEQ ID NO: 2
 35 <211> LENGTH: 20
 36 <212> TYPE: DNA
 37 <213> ORGANISM: Mycobacterium tuberculosis
 39 <220> FEATURE:
 40 <223> OTHER INFORMATION: rpoB-R amplification primer
 42 <400> SEQUENCE: 2
 43 tacggcgttt cgatgaaccc 20
 46 <210> SEQ ID NO: 3
 47 <211> LENGTH: 20
 48 <212> TYPE: DNA
 49 <213> ORGANISM: Mycobacterium tuberculosis
 51 <220> FEATURE:
 52 <223> OTHER INFORMATION: rpoB-5s sequencing primer
 54 <400> SEQUENCE: 3
 55 tacggtcggc gagctgatcc 20
 58 <210> SEQ ID NO: 4
 59 <211> LENGTH: 20
 60 <212> TYPE: DNA
 61 <213> ORGANISM: Mycobacterium tuberculosis
 63 <220> FEATURE:
 64 <223> OTHER INFORMATION: rpoB-3s sequencing primer
 66 <400> SEQUENCE: 4
 67 tacggcgttt cgatgaaccc 20
 70 <210> SEQ ID NO: 5
 71 <211> LENGTH: 480
 72 <212> TYPE: DNA

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/786,105

DATE: 12/21/2001

TIME: 13:12:24

Input Set : A:\Vgenp055.app

Output Set: N:\CRF3\12212001\I786105.raw

```

73 <213> ORGANISM: Mycobacterium tuberculosis
75 <220> FEATURE:
76 <223> OTHER INFORMATION: rpoB (rifampin resistance)
78 <400> SEQUENCE: 5
79 aaaccgacga catcgaccac ttcggaacc gccgcctgcg tacggtcggc gagctgatcc 60
80 aaaaccagat cggggtcggc atgtcgcgga tggagcgggt ggtccgggag cggatgacca 120
81 cccaggacgt ggaggcgatc acaccgcaga cgttgatcaa catccggccg gtggtcgccg 180
82 cgatcaagga gttcttcggc accagccagc tgagccaatt catggaccag aacaaccgcg 240
83 tgtcggggtt gaccacaag cgccgactgt cggcgctggg gcccggcggg ctgtcacgtg 300
84 agcgtgcccg gctggaggtc cgcgacgtgc acccgctcgca ctacggccgg atgtgcccga 360
85 tcgaaacccc tgaggggccc aacatcggtc tgatcggtc gctgtcggtg tacgcgcggg 420
86 tcaaccggtt cgggttcacg gaaacgccgt accgcaaggt ggtcgacggc gtggttagcg 480
89 <210> SEQ ID NO: 6
90 <211> LENGTH: 20
91 <212> TYPE: DNA
92 <213> ORGANISM: Mycobacterium tuberculosis
94 <220> FEATURE:
95 <223> OTHER INFORMATION: katG-F amplification primer
97 <400> SEQUENCE: 6
98 atggggctga tctacgtgaa 20
101 <210> SEQ ID NO: 7
102 <211> LENGTH: 20
103 <212> TYPE: DNA
104 <213> ORGANISM: Mycobacterium tuberculosis
106 <220> FEATURE:
107 <223> OTHER INFORMATION: katG-R amplification primer
109 <400> SEQUENCE: 7
110 ggtgttccag ccagcgacgc 20
113 <210> SEQ ID NO: 8
114 <211> LENGTH: 20
115 <212> TYPE: DNA
116 <213> ORGANISM: Mycobacterium tuberculosis
118 <220> FEATURE:
119 <223> OTHER INFORMATION: katG-5s sequencing primer
121 <400> SEQUENCE: 8
122 atggggctga tctacgtgaa 20
125 <210> SEQ ID NO: 9
126 <211> LENGTH: 20
127 <212> TYPE: DNA
128 <213> ORGANISM: Mycobacterium tuberculosis
130 <220> FEATURE:
131 <223> OTHER INFORMATION: katG-3s sequencing primer
133 <400> SEQUENCE: 9
134 ggtgttccag ccagcgacgc 20
137 <210> SEQ ID NO: 10
138 <211> LENGTH: 660
139 <212> TYPE: DNA
140 <213> ORGANISM: Mycobacterium tuberculosis
142 <220> FEATURE:

```

RAW SEQUENCE LISTING

DATE: 12/21/2001

PATENT APPLICATION: US/09/786,105

TIME: 13:12:24

Input Set : A:\Vgenp055.app

Output Set: N:\CRF3\12212001\I786105.raw

```

143 <223> OTHER INFORMATION: katG (isoniazid resistance)
145 <400> SEQUENCE: 10
146 gctcggcgat gagcggtaca gcggttaagcg ggatctggag aaccgcgtgg ccgcgggtgca 60
147 gatggggctg atctacgtga acccgagggg gccgaacggc aaccgggacc ccatggccgc 120
148 ggcgggtcgac attcgcgaga cgtttcggcg catggccatg aacgacgtcg aaacagcggc 180
149 gctgatcgtc ggcggtcaca ctttcggtaa gacccatggc gccggcccgg ccgatctggt 240
150 cggccccgaa cccgaggctg ctccgctgga gcagatgggc ttgggctgga agagctcgta 300
151 tggcaccgga accggttaagg acgcgatcac cagcggcatc gaggtcgtat ggacgaacac 360
152 cccgacgaaa tgggacaaca gtttcctcga gatcctgtac ggctacgagt gggagctgac 420
153 gaagagccct gctggcgctt ggcaatacac cgccaaggac ggcgccggtg ccggcaccat 480
154 cccggacccg ttcgggcgggc cagggcgctc cccgacgatg ctggccactg acctctcgt 540
155 gcggggtgat ccgatctatg agcggatcac gcgtcgctgg ctggaacacc ccgaggaatt 600
156 ggccgacgag ttcgccaagg cctggtacaa gctgatccac cgagacatgg gtcccgttgc 660
159 <210> SEQ ID NO: 11
160 <211> LENGTH: 20
161 <212> TYPE: DNA
162 <213> ORGANISM: Mycobacterium tuberculosis
164 <220> FEATURE:
165 <223> OTHER INFORMATION: PR-F amplification primer
167 <400> SEQUENCE: 11
168 accactgctt tgccgccacc 20
171 <210> SEQ ID NO: 12
172 <211> LENGTH: 20
173 <212> TYPE: DNA
174 <213> ORGANISM: Mycobacterium tuberculosis
176 <220> FEATURE:
177 <223> OTHER INFORMATION: PR-R amplification primer
179 <400> SEQUENCE: 12
180 ccgatgagag cggtgagctg 20
183 <210> SEQ ID NO: 13
184 <211> LENGTH: 20
185 <212> TYPE: DNA
186 <213> ORGANISM: Mycobacterium tuberculosis
188 <220> FEATURE:
189 <223> OTHER INFORMATION: PR-5s sequencing primer
191 <400> SEQUENCE: 13
192 accactgctt tgccgccacc 20
195 <210> SEQ ID NO: 14
196 <211> LENGTH: 20
197 <212> TYPE: DNA
198 <213> ORGANISM: Mycobacterium tuberculosis
200 <220> FEATURE:
201 <223> OTHER INFORMATION: PR-3s sequencing primer
203 <400> SEQUENCE: 14
204 ccgatgagag cggtgagctg 20
207 <210> SEQ ID NO: 15
208 <211> LENGTH: 420
209 <212> TYPE: DNA
210 <213> ORGANISM: Mycobacterium tuberculosis

```

RAW SEQUENCE LISTING

DATE: 12/21/2001

PATENT APPLICATION: US/09/786,105

TIME: 13:12:24

Input Set : A:\Vgenp055.app

Output Set: N:\CRF3\12212001\I786105.raw

```

212 <220> FEATURE:
213 <223> OTHER INFORMATION: oxyR-ahpC intergenic region (PR)
215 <400> SEQUENCE: 15
216 atgccctggg ggtgcaccga gaccggcttc cgaccaccgc tcgccgcaac gtcgactggc 60
217 tcatatcgag aatgcttgcg gcaactgctga accactgctt tgccgccacc gcggcgaacg 120
218 cgcgaagccc ggccacggcc ggctagcacc tcttggcggc gatgccgata aatatggtgt 180
219 gatatatcac ctttgctga cagcgacttc acggcacgat ggaatgtcgc aaccaaatgc 240
220 attgtccgct ttgatgatga ggagagtcac gccactgcta accattggcg atcaattccc 300
221 cgcctaccag ctaccgctc tcacggcgcg tgacctgtcc aaggctcgacg ccaagcagcc 360
222 cggcgactac ttcaccacta tcaccagtga cgaacaccca ggcaagtggc ggggtggtgt 420
225 <210> SEQ ID NO: 16
226 <211> LENGTH: 20
227 <212> TYPE: DNA
228 <213> ORGANISM: Mycobacterium tuberculosis
230 <220> FEATURE:
231 <223> OTHER INFORMATION: fabG-F amplification primer
233 <400> SEQUENCE: 16
234 cctcgctgcc cagaaaggga 20
237 <210> SEQ ID NO: 17
238 <211> LENGTH: 20
239 <212> TYPE: DNA
240 <213> ORGANISM: Mycobacterium tuberculosis
242 <220> FEATURE:
243 <223> OTHER INFORMATION: fabG-R amplification primer
245 <400> SEQUENCE: 17
246 atcccccggt ttctccggt 20
249 <210> SEQ ID NO: 18
250 <211> LENGTH: 20
251 <212> TYPE: DNA
252 <213> ORGANISM: Mycobacterium tuberculosis
254 <220> FEATURE:
255 <223> OTHER INFORMATION: fabG-5s sequencing primer
257 <400> SEQUENCE: 18
258 cctcgctgcc cagaaaggga 20
261 <210> SEQ ID NO: 19
262 <211> LENGTH: 20
263 <212> TYPE: DNA
264 <213> ORGANISM: Mycobacterium tuberculosis
266 <220> FEATURE:
267 <223> OTHER INFORMATION: fabG-3s sequencing primer
269 <400> SEQUENCE: 19
270 atcccccggt ttctccggt 20
273 <210> SEQ ID NO: 20
274 <211> LENGTH: 360
275 <212> TYPE: DNA
276 <213> ORGANISM: Mycobacterium tuberculosis
278 <220> FEATURE:
279 <223> OTHER INFORMATION: fabG (isoniazid resistance)
281 <400> SEQUENCE: 281

```

RAW SEQUENCE LISTING

DATE: 12/21/2001

PATENT APPLICATION: US/09/786,105

TIME: 13:12:24

Input Set : A:\Vgenp055.app

Output Set: N:\CRF3\12212001\I786105.raw

```

282 agcgcgacat acctgctgcg caattcgtag ggcgtcaata caccgcgacg cagggcctcg 60
283 ctgcccagaa agggatccgt catggtcgaa gtgtgctgag tcacaccgac aaacgtcacg 120
284 agcgtaaccc cagtgcgaaa gtccccgccg gaaatcgag ccacgttacg ctcgtaggaca 180
285 taccgatttc ggccccggccg cggcgagacg ataggttgtc ggggtgactg ccacagccac 240
286 tgaagggggc aaacccccat tcgtatcccg ttcagtcctg gttaccggag gaaaccgggg 300
287 gatcgggctg gcgatcgac agcggctggc tgccgacggc cacaaggtgg ccgtcaccca 360
290 <210> SEQ ID NO: 21
291 <211> LENGTH: 20
292 <212> TYPE: DNA
293 <213> ORGANISM: Mycobacterium tuberculosis
295 <220> FEATURE:
296 <223> OTHER INFORMATION: s12-F amplification primer
298 <400> SEQUENCE: 21
299 cggtagatgc caaccatcca 20
302 <210> SEQ ID NO: 22
303 <211> LENGTH: 20
304 <212> TYPE: DNA
305 <213> ORGANISM: Mycobacterium tuberculosis
307 <220> FEATURE:
308 <223> OTHER INFORMATION: s12-R amplification primer
310 <400> SEQUENCE: 22
311 gcatcagccc ttctccttct 20
314 <210> SEQ ID NO: 23
315 <211> LENGTH: 20
316 <212> TYPE: DNA
317 <213> ORGANISM: Mycobacterium tuberculosis
319 <220> FEATURE:
320 <223> OTHER INFORMATION: s12-5s sequencing primer
322 <400> SEQUENCE: 23
323 cggtagatgc caaccatcca 20
326 <210> SEQ ID NO: 24
327 <211> LENGTH: 20
328 <212> TYPE: DNA
329 <213> ORGANISM: Mycobacterium tuberculosis
331 <220> FEATURE:
332 <223> OTHER INFORMATION: s12-3s sequencing primer
334 <400> SEQUENCE: 24
335 gcatcagccc ttctccttct 20
338 <210> SEQ ID NO: 25
339 <211> LENGTH: 420
340 <212> TYPE: DNA
341 <213> ORGANISM: Mycobacterium tuberculosis
343 <220> FEATURE:
344 <223> OTHER INFORMATION: rpsL/s12 (streptomycin resistance)
346 <400> SEQUENCE: 25
347 cggtagatgc caaccatcca gcagctggtc cgcaagggtc gtcgggacaa gatcagtaag 60
348 gtcaagaccg cggctctgaa gggcagcccg cagcgtcgtg gtgtatgcac ccgcgtgtac 120
349 accaccactc cgaagaagcc gaactcggcg cttcggaagg ttgccgcgt gaagttgacg 180
350 agtcaggctg aggtcacggc gtacattccc ggcgagggcc acaacctgca ggagcactcg 240

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/786,105

DATE: 12/21/2001

TIME: 13:12:25

Input Set : A:\Vgenp055.app

Output Set: N:\CRF3\12212001\I786105.raw

L:12 M:270 C: Current Application Number differs, Replaced Application Number

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date